

SERVIT, Z.; DUDAS, D.; MACNEK, J.; STERCOVA, A.; KRISTOF, M.; CERVENKOVA, V.

Reflex effects in the pathogenesis of epilepsy in the light of clinical statistics. Cas. lek. cesk. 101 no.40:1200-1204 5 0 '62.

1. Fyziologicky ustav CSAV v Praze, reditel prof. dr. Zd. Servit.
(EPILEPSY) (REFLEX)

SERVIT, Z.

Reflex mechanisms in the pathogenesis of an attack of epilepsy.
Vestnik CSAV 70 no.1:75 '61.

1. Clen korespondent Ceskoslovenske akademie ved; Fyziologicky
ustav, Ceskoslovenska akademie ved.

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MALEK, Ivan, akademik; BLASKOVIC, Dionyz, akademik; SERVIT, Zdenek, Sc.Dr.

The letter sent to the Central Committee of the Communist Party of Czechoslovakia from the conference held in commemoration of the 10th anniversary of the foundation of the biological institutes of the Czechoslovak Academy of Sciences. Vestnik CSAV 70 no.1:76-78 '61.

1. Reditel Biologickeho ustavu, Ceskoslovenska akademie ved (for Malek).
2. Reditel Virologickeho ustavu, Ceskoslovenska akademie ved (for Blaskovic).
3. Clen korespondent Ceskoslovenske akademie ved; reditel Fyziologickeho ustavu, Ceskoslovenske akademie ved (for Servit).

CZECHOSLOVAKIA

SERVIT, Z.; Physiological Institute of the Czechoslovak Academy of Sciences (Fysiologicky ustav CSAV,) Prague.

"Current Status of the Theory of Electroencephalography."

Prague, Ceskoslovenska Fysiologie, Vol 12, No 4, July 1963; pp 225-242.

Abstract: Well-organized review of the history of electroencephalography, of mechanisms of origin of brain waves, electrical potentials and their patterns; relation to the histologic structure of the brain, autorhythmicity and synchronization; experimental research methods and clinical applications. Two Soviet, 20 Czech and 113 Western references dated 1875-1962; 2 diagrams.

SERVIT, Z.

Theory of the nervous seizure. History, current status and prospects. Cesk. fysiол. 13 no.2:89-107 Ja'64

1. Fysiologicky ustav CSAV Praha.

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SMILG, S.

The founder of Czechoslovak experimental neurology. *Cesk. fysiол.*
14 no.3:235 My'65.

L 12841-66

ACC NR: AP6005710

SOURCE CODE: CZ/0082/65/000/003/0207/0212

AUTHOR: Servit, Z.

ORG: Physiological Institute, CSAV, Prague (Fyziologicky ustav CSAV)

20
B

TITLE: Pathophysiology of paroxysmal susceptibility

SOURCE: Ceskoslovenska neurologie, no. 3, 1965, 207-212

TOPIC TAGS: pathology, medical research, neurology, nervous system disease

ABSTRACT:

The effort to counteract pathologically high susceptibility to paroxysms has passed from the empirical stage to one based on pathologically justified measures. Success will depend on the degree to which clinical research is based on experimental research of a suitable model. An important approach is that of comparative pathology, which studies the changes in pathological reaction at different levels of phylogenetic brain development. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 022 / OTH REF: 022

Card 1/1

HW

SERVUS, S.

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their
Application. Chemical Engineering.

H-2

Abs Jour: Ref. Zhur-Khim., No 2, 1959, 4925.

Author : Stelsovsky E., Hanzalek J., Servus S.

Inst :

Title : Jet Gas Purifier.

Orig Pub: Strojirenstvi, 1958, 8, No 1, 3-7.

Abstract: A jet gas purifier is used to eliminate highly dispersed particles from a gas. It consists of a Venturi tube, into which the gas to be purified flows at a speed of 50 - 150 m/sec and the atomized liquid is fed simultaneously, and of a cyclone. The formed drops of the liquid moisten and aggragate the particles present in the gas, after which they are eliminated from the gas in the cyclone. Graphs showing the dependence of the effectiveness of the work of the gas purifier on the velocity of the gas, on the size of drops and on

Card : 1/2

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CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their
Application. Chemical Engineering.

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Abs Jour: Ref. Zhur-Khim., No 2, 1959, 4925.

the amount of the atomized liquid are presented. Data concerning the work of a gas purifier used for the purification of generator gas from drops of a liquid are given: the capacity is 5000 cub.m per hour, the diameter of the cyclone is 1.0 m and its height is 3.25 m, the initial concentration of drops of the liquid in the gas is 40 - 50 g per cub.m, the extent, to which the drops are intercepted is more than 99%, the final concentration of drops of the liquid in the gas is 0.2 - 0.4 g per cub.m, the temperature of the gas is 55 to 65°C and the resistance of the gas purifier is 240 mm of water column. - Yu. Skoretzkiy.

Card : 2/2

LATUSZKIEWICZ, Wieslaw, mgr.,inz.; SERWA, Wladyslaw, mgr.,inz.

Transistor installation for the quality control of providing
blades for TUK 1 turbines. Energetyka przem 10 no.3:117-119 '62.

11660

S/196/63/000/001/024/035
E194/E155

26.2122

AUTHOR: Serwa, Wladyslaw

TITLE: Experience of testing turbine blade vibrations.
Part I.

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.1, 1963, 4, abstract 1 S 15. (Energ. przemysl,
v.10, no.4, 1962, 153-156). (Polish)

TEXT: The Laboratoryia turbin (Turbine Laboratory) of the
Teplotekhnicheskiiy institut (Heat Engineering Institute) PPR,
besides investigating turbine blade vibrations on the Institute's
rigs, has for some years been making tests under service
conditions in power plants, discovering the causes of blading
failures. The natural frequencies of blade vibrations are
determined by electronic equipment using the free vibration method
with a rubber hammer, a piezo-electric pick-up, a cathode-ray
oscillograph and a signal generator, or by the method of
vibration resonance electro-dynamically-excited and using the same
instruments together with a rectifier and a valve amplifier. ✓

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Experience of testing turbine blade... S/196/63/000/001/024/035
E194/E155

A procedure is given for detuning from resonance. Various types of shrouding and binding wires that influence blade vibrations are considered. See also Ref.zh. E, 1962, 18 G 85 and 22 G 154.

[Abstractor's note: Complete translation.]

X

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CHRUST, Witold, mgr., inc.; SFRWA, Wladyslaw, mgr., inz.

The TRV 2 Vibrometer vibration measuring bridge. Ciężki masz przepływ
no. 37/38:21-27. '62

CHRUST, Witold, mgr inz.; LATUSZKIEWICZ, Wieslaw, mgr inz.; SERWA,
Wladyslaw, mgr inz.

Measuring the relative displacement of elements of gear-type
coupling of a steam turbine under variable operational con-
ditions. Gosp paliw 11 no. 12:477-479 D'63.

1. Zaklad Turbin Cieplnych, Instytut Techniki Cieplnej,
Lodz.

L 18894-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD/HW

ACCESSION NR: AP3006243

P/0035/63/000/016/0493/0498

AUTHOR: Serwa, Wladyslaw, (Engineer), Lodz

TITLE: Damping of vibrations in turbine blade systems

SOURCE: Przegląd mechaniczny, no. 16, 1963, 493-498

TOPIC TAGS: vibration damping, turbine blade

ABSTRACT: The phenomenon of vibration damping is one of the basic factors affecting the magnitude of stresses in the blades of a rotating machine, and consequently determines the useful life of the machine as well as the safety of its operation. The Instytut Techniki Ciepłej (Institute of Heat Engineering) in Lodz has been studying this problem for several years, and some of the results are presented in this article. The internal damping in the blade material plays the decisive role in the damping of vibrations of a freely supported blade; the damping in its seat is negligible if the blade is fastened tightly enough. The analysis has shown that testing a sample of the blade material under conditions approximating those of the operating turbine leads to reliable conclusions about the damping characteristics of the blade. The method

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developed here is based on using a tuning fork made of the same material, then machined and heat treated like the blade (ref. 2: A.W. Cochardt "A method for determining the internal damping of machine members", Journal of Applied Mechanics Vol 21, nr. 3, 1954). The test apparatus consists of the tuning fork placed in a constant-temperature oven, an arrangement for exciting vibrations, and instruments for their recording and measuring, namely: a loop-oscillograph, a bridge, and resistance tensometers. The procedure is to determine the relation between the logarithmic decrement of vibrations and the maximum stresses in the base section of the tuning fork. There is one parameter in this relation which is independent of the shape of the sample and depends only on the magnitude of the stresses. Linearity or near-linearity was observed for steels 1H13, 15H11MF in the range from zero to about 1000 kilograms/cm². A marked effect of the temperature was noted, but no regularity could be ascertained. The effectiveness of several structural features commonly employed for vibration damping was investigated: 1) One wire tie near the free ends of the blades contributes practically nothing to the damping, while two wire ties increase the damping by about three times as compared with free blades, and the internal damping in the blade material amounts to about 35% of the total damping with two wire ties. 2) A strap riveted to the blades adds only little, about

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30%, to the damping; a supplementary stiffening tie at about 6/10 of its length from the seat increases the damping by about 4 times. It was found, that the manner of riveting has a significant effect on the damping. 3) The number of blades influences the damping characteristics, especially up to five blades per set, but only when they are strapped and tied; when strapped only, the number of blades is not significant. These conclusions are based both on theoretical considerations and experiments. 4) The location of the stiffening wire tie along strapped flat blades is important in so far as the damping becomes the more effective the nearer the tie is to the blade seat. As to the method of tying, it was established that sectionalizing the wires over quarter of the periphery yields the optimum performance: no tangential vibrations can occur, as the wiring remains an integral part of the runner; the only possible vibration of the blades at the tie-in points are of high frequency, a multiple of the runner speed, beyond the dangerous limits. Certain design criteria for the wire ties have been established, namely that the friction force at the tie-in point due to centrifugal action should be larger than the force which excites vibrations in the blade, that the looseness of the wire should not exceed a certain maximum and thus the necessary friction force be secured, that the wire must have sufficient resistance to bending and that the overlap be

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ACCESSION NR: AP3006243

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sufficiently long for safety. The results of all these theoretical and experimental studies should prove to be significant for the design and construction of rotating machines in general, but particularly applicable to steam and gas turbines. Orig. art. has: 17 diagrams and 8 formulae.

ASSOCIATION: Institut Techniki Cieplnej. Lodz (Institute of Heat Engineering)

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ENCL: 00

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NO REF SOV: 003

OTHER: 006

Card 4/4

SERWA, Wladyslaw, mgr inz.

Dumping wires in turbine blade rings. Gosp paliw ll no.7:
277-279 JI '63.

SERWA, Wladyslaw, mgr inz.

Vibration studies of turbomachine sets. Inst techn ciepl prace
9 no. 20:19-33 '64.

SFRWA, Wladyslaw, mgr inz.

Vibration damping of turbine blade packets. Inst techn
ciepl prace 10 no.23:1-29 '64.

1. Zaklad Turbin Ciepnych, Instytut Techniki Cieplnej, Lodz.

LISICKI, Andrzej, mgr. inz.; SERWA, Wladyslaw mgr inz.

A peculiar case of breakdown of the buckets of a Pierwsza Bernenska
steam turbine. Gosp paliw 12 no.7:Suppl: Biul inst techn ciepl 12
no.7:254-256 J1 '64.

LISICKI, Andrzej, mgr inz.; SERWA, Wladyslaw, mgr inz.

A particular case of blade breakdown of the Pierwsza Bernacka
steam turbine. Biul inst techn ciapl 12 no.7:254-255 J1 '64.

1. Department of Thermal Turbines of the Institute of Heat Engineering,
Lodz.

Reel #497

Serwa, Wladyslaw

END